

## **RV Generators Course to Begin in February**

*PRVCA to give employees of members a 50% reimbursement on tuition and textbooks*

The RV Generators Course begins February 16th and runs through March 30th. The program, which is run by Northampton Community College and the Pennsylvania RV and Camping Association, allows students to gain an in-depth understanding of recreation vehicle maintenance with intensive, competency-based instruction. Students simply log on to access the lecture notes, hands-on assignments, quizzes and chat with the instructor and other students. The program gives students the flexibility to complete the course from the comfort of their home or dealership without having the expense of traveling to a training facility.

The program is approved by RVIA and qualifies for recertification hours. Students receive a certificate of completion successful completion of the course. The program is designed for RV maintenance and sales personnel, service managers, factory field technicians, service representatives, inspectors and those seeking a new, hands-on career in a growing industry.

Those who complete the entire program will earn a Specialized Diploma from Northampton Community College. Students not wishing to obtain the Specialized Diploma may also enroll in individual courses as desired. Those who earn the Specialized Diploma will be prepared to test for the RV Service Technician or a Master Certified RV Service Technician with the Recreation Vehicle Industry Association (RVIA).

### **Course Details:**

#### **RV Generators (RVTNC104)**

February 16 – March 30

*Tuition Cost:* \$350 per student

Employees of PRVCA members will receive a 50% reimbursement on tuition and textbooks upon successful completion of the course.

*Textbook Cost:* \$25.95 (contact [heather@prvca.org](mailto:heather@prvca.org) to order)

*RV Technician Recertification Hours: 48 hours*

The RV Generator Course provides the students a very detailed look into the idiosyncrasies of that voltage and power-producing device. Understanding that mechanical motion (including mechanical adjustments) has a direct electrical result helps students through the nuances of this sometimes difficult-to-understand machine. Generator sizing, installation, troubleshooting, repair and maintenance are all studied. After successful completion of this course the student will effectively be able to:

- Interpret data plate information
- Explain the system theory and operation (sine wave and RMS)
- Identify and explain generator components
- Identify engine components (general)
- Match generator output to RV-based electrical loads
- Connect transfer switches for electrical separation (manual and automatic)
- Understand and wire start/stop switches and hour meters
- Describe fuel sources
- Demonstrate the ability to perform necessary mathematical and geometric functions.
- Route exhaust components per manufacturer instructions

- Verify and comply with compartment requirements for ventilation, clearances, materials and vapor seal
- Check operation of installed generator
- Remove and install generators
- Define basic electrical terms related to generators
- Make electrical connections per manufacturer instructions and NEC, (including grounding)
- Install a remote stop/start switch
- Service generator ignition systems
- Service generator carburetion systems
- Decarbon generator engines
- Connect fuel sources to generator
- Perform summer and winter by-pass inspection (air preheater)
- Explain and test generator components
- Test and adjust generator voltage, frequency droop and capacity
- Identify generator control systems (inverter or variable speed type)
- Read generator schematics and wiring diagrams
- Perform generator engine tune-ups (adjust valves and carburetors)
- Service generator governors and automatic chokes
- Remove, replace and test components
- Verify serviceability of unit; verify and set outputs
- Change air, fuel and oil filters
- Perform oil change
- Use diagnostic charts per service manual
- Identify electrical faults and make necessary repairs
- Systematically diagnose generator/engine malfunction and generator controls
- Troubleshoot remote start/stop switch and hour meter
- Identify and apply codes and standards
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#### **Upcoming Courses:**

RV Liquid Propane Systems: April 6 – May 10

To register, please go on-line to: <https://lifelearn.northampton.edu/modules/>

- Click on View Catalog under Center for Business and Industry (CBI).
- Click on Technical and Trades.
- Search for course and follow registration procedure.
- Please call if you have problems with registration 610-861-5390.
- To order textbooks, call 888-303-2887 or email [heather@prvca.org](mailto:heather@prvca.org).

To purchase the textbook required for the course (\$25.95 – includes shipping), contact [heather@prvca.org](mailto:heather@prvca.org) or call 888-303-2887. The courses materials are supported by RVIA and feature competency-based instruction, assignments and testing.